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EXAMINER	
KLIMACH, PAULA W	

ART UNIT	PAPER NUMBER
2135	

DATE MAILED: 05/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/800,719	YANOVSKY, ELI	
	Examiner	Art Unit	
	Paula W. Klimach	2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 February 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-31* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

S-0-0-

DETAILED ACTION

Response to Amendment

This office action is in response to amendment filed on 02/09/05. Original application contained. Claims 1-31. The amendment filed on 02/09/05 have been entered and made of record. Therefore, presently pending claims are 1-31.

Response to Arguments

Applicant's arguments filed 02/09/05 have been fully considered but they are not persuasive because of following reasons.

Applicant argued that Kunstadt does not carry data as a digital bit stream. This is not found persuasive. First, the applicant does not claim a digital bit stream. Second, even if the applicant did claim a digital bit stream, the bit stream disclosed by Kunstadt does not require being sent in a digital bit stream. An analogue bit stream is the method of transmission of data from the sender to the receiver in a wireless network. The same digital information is transmitted in an analogue version, hence the digital to analogue converter (54) this is a device that is used to convert digital data into analogue data. In this case the conversion is so that the data can be transmitted.

Applicant argued further that it would not be obvious to combine Shefi with Kunstadt. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge

generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the bit stream of Kunstadt is used for operations disclosed by Shefi wherein the motivation to perform the operation disclosed in Shefi is taken from the reference Shefi (column 3 lines 19-21 in combination with column 5 lines 11-16 and further in combination with column 10 lines 15-20).

Applicant argues further, "By contrast the present invention provides a digital bi tstream which is available to both parties, and random selector which uses data from the bit stream itself to generate a random bit source." Although the applicant includes the feature of making the bit stream available to both parties in the preamble of the claim, the feature is not included in the claim limitations. In response to applicant's arguments, the recitation "bitstream which is available to both parties" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., The prior art does not how to provide a random bit source available at both the parties without providing an entire secret table which is availavle separately and identically at each party) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations

from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicants clearly have failed to explicitly identify specific claim limitations, which would define a patentable distinction over prior arts.

The examiner is not trying to teach the invention but is merely trying to interpret the claim language in its broadest and reasonable meaning. The examiner will not interpret to read narrowly the claim language to read exactly from the specification, but will interpret the claim language in the broadest reasonable interpretation in view of the specification. Therefore, the examiner asserts that Kunstadt and Shefi do teach or suggest the subject matter broadly recited in independent Claims 1, 13, and 21. Dependent Claims 2-12, 14-20, and 22-31 are also rejected at least by virtue of their dependency on independent claims and by other reason set forth in this office action. Accordingly, rejections for claims 1-31 are respectfully maintained.

DETAILED ACTION

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-8, 13-16, and 21-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kunstadt (5,003,598) in view of Shefi (6,266,413).

In reference to claims 1, 13-14, and 21, Kunstadt discloses a system for signal manipulation and inverse signal manipulation means at the sending and receiving location that

uses the signal from a public broadcast station (abstract). The sender and receiver have access to the same broadcast station (column 1 lines 51-53). The signal is from a mobile cellular telephone broadcast station, and therefore a bit stream (column 1 lines 45-49).

However Kunstadt does not expressly disclose the bit stream being randomly selected and the selector being operable to use said random bit source to randomize said selection operation in an identical manner.

Shefi discloses a comprising a selector for randomly selecting parts of a random number table to form a random source (column 11 lines 48-54). The random number is then used as part of the pointer or one-time key to find the next random number from the table and therefor the selector (pointer, one-time key) is operable to use the random bit source to randomize the selection operation in an identical manner (column 13 lines 16-46).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use the method of selection of the random source as in Shefi in the system of Kunstadt. One of ordinary skill in the art would have been motivated to do this because the one time pad is theoretically unbreakable (column 3 lines 19-21), however both parties require the same random number generator that provides at least one identical pseudorandom number (column 5 lines 11-16) and a practically unlimited number of electronic one-time pads (column 10 lines 15-20).

In reference to claims 2, 15, and 22, wherein said primary bit stream is obtainable as a stream of bits from a data exchange process between said two parties (column 1 lines 39-45).

In reference to claims 3 and 23-24, wherein said bits in said primary bit stream are separately identifiable by an address, and wherein said selector is operable to select said bits by

random selection of addresses. Kunstadt discloses a system that is used by a mobile cellular phone and therefore manipulates information in the form of bits (column 1 lines 45-50). Bits are by definition separately identifiable by an address that is used to select the broadcast information used as the identical signal.

In reference to claims 4 and 25, wherein each selector comprises an address generator and each address generator is identically set.

Kunstadt does not disclose a system wherein each selector comprises an address generator.

Shefi discloses a selector that creates a random number that is used as the pointer; the pointer is used to indicate the position of the real random number from the table of random numbers. Both parties as a result of having the same value for the pointer and the values in the table, has identical values for the generated random number (column 11 lines 48-55).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use the method of selection of the random source as in Shefi in the system of Kunstadt. One of ordinary skill in the art would have been motivated to do this because the one time pad is theoretically unbreakable (column 3 lines 19-21), however both parties require the same random number generator that provides at least one identical pseudorandom number (column 5 lines 11-16) and a practically unlimited number of electronic one-time pads (column 10 lines 15-20).

In reference to claim 5, wherein each address generator is operable to make use of a random bit stream to randomize said addresses generation.

Kunstadt does not disclose a system wherein each address generator is operable to make use of a random bit stream to randomize said addresses generation.

Shefi discloses a system wherein the generated number that includes the selected random number and merged with the generated number which is then used as a pointer into the random number table (column 13 lines 16-46).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use the method of selection of the random source as in Shefi in the system of Kunstadt. One of ordinary skill in the art would have been motivated to do this because the one time pad is theoretically unbreakable (column 3 lines 19-21), however both parties require the same random number generator that provides at least one identical pseudorandom number (column 5 lines 11-16) and a practically unlimited number of electronic one-time pads (column 10 lines 15-20).

In reference to claims 6 and 26, further comprising a controller for exchanging control data between said parties to enable each party to determine that each selector is operating synchronously at each party (column 1 lines 52-51). The parties have a timing signal that is used to ensure that synchronously sampled signal.

In reference to claims 7-8,16, and 27, wherein said control data includes any one of a group comprising: redundancy check data of at least some of the bits from said random bit source, and a hash encoding result of at least some of the bits from said random bit source.

Kunstadt does not disclose a system wherein said control data includes any one of a group comprising: redundancy check data of at least some of the bits from said random bit source, and a hash encoding result of at least some of the bits from said random bit source.

Shefi discloses a system wherein an identifier used to determine whether the device has the correct table of random numbers and therefore synchronize the two parties. The system uses a mathematical function that reversible, this includes a hash function, to generate the identifier (column 19 lines 60-65). The mathematical function uses the results of the one-time pad and therefore the random bit source. The random bit source is found using the pointer (address), therefore the pointer is used to come to the encryption of the identifier.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use the reversible mathematical function to create an identifier for synchronization between the communicating parties as in Shefi in the system of Kunstadt. One of ordinary skill in the art would have been motivated to do this because a system that does not have the correct tables and values will not be able to communicate with the processor, therefore the communicating devices will know that they have the same data and that the random number generators are creating the same pointers.

Claims 9-12, 17-20, 28-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kunstadt and Shefi as applied to claim 6 above, and further in view of Midgley et al. (6,460,055 B1).

In reference to claims 9,17-18, and 28-29, wherein the selector further comprises a resynchronizer operable to determine from said control data that synchronization has been lost between the parties and to regain synchronization based on a predetermined earlier part of the output of said random bit source.

Although Shefi discloses the determination that synchronization has been lost using the identifier as discussed in the rejection for claim 7, neither Shefi nor Kunstadt disclose regaining synchronization based on a predetermined earlier part of the output.

Midgley discloses determining lost synchronization by detecting when a user changes files (column 7 lines 49-51). The system regains synchronization based on the journal files to update the target files (column 12 line 63 to column 13 line 12). Therefore the earlier part of the output (journal) is used to regain synchronization.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to regain synchronization using the method of Midgley in the system of Kunstadt. One of ordinary skill in the art would have been motivated to do this because it would ensure that the target is updated in a transactionally safe way (Midgley column 13 lines 5-10).

In reference to claims 10, 19, and 30, further comprising a backup data exchanger for exchanging the data for regaining synchronization.

Kunstadt and Shefi do not disclose a backup exchanger for exchanging the data for regaining synchronization.

Midgley discloses keeping a backup of the data exchange at the back up server (column 13 lines 13-25).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to keep a backup for synchronization using the method of Midgley in the system of Kunstadt. One of ordinary skill in the art would have been motivated to do this because it would ensure that the target is updated in a transactionally safe way (Midgley column 13 lines 5-10).

In reference to claim 11, wherein the resynchronizer further comprises a backup data storage for storing previously exchanged data for regaining synchronization to be used for resynchronization with a party that has not made said exchange.

Kunstadt and Shefi do not disclose the resynchronizer further comprises a backup data storage for storing previously exchanged data for regaining synchronization to be used for resynchronization with a party that has not made said exchange.

Midgley discloses keeping a backup of the data exchange at the back up server (column 13 lines 13-25).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to keep a backup for synchronization using the method of Midgley in the system of Kunstadt. One of ordinary skill in the art would have been motivated to do this because it would ensure that the target is updated in a transactionally safe way (Midgley column 13 lines 5-10).

In reference to claims 12, 20, and 31, wherein said resynchronizer is operable to create in advance future data to be used for resynchronization for resynchronizing with a party that has made said exchange in advance.

Although Kunstadt discloses the continuous generation of pseudo-random noise signal (column 3 lines 37-42), and therefore creation of advance future data, Kunstadt does not disclose the resynchronization with a party.

Midgley discloses keeping a backup of the data exchange at the back up server (column 13 lines 13-25), which is used for resynchronization.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to keep a backup for synchronization using the method of Midgley in the system of Kunstadt. One of ordinary skill in the art would have been motivated to do this because it would ensure that the target is updated in a transactionally safe way (Midgley column 13 lines 5-10).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paula W. Klimach whose telephone number is (571) 272-3854. The examiner can normally be reached on Mon to Thr 9:30 a.m to 5:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on (571) 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PWK
Friday, May 20, 2005

KIM VU
SUPERVISORY PATENT EXAMINER
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